

Remarks:

Claims 1-36 are pending in the present application and have been restricted.

Restriction/Election

Applicants herein provisionally elect (i) Group I, claims 1-11, and (ii) SEQ ID NO: 1, with traverse. This election is being made without prejudice to Applicants' rights with respect to the other groups, including the right to file divisional applications thereon.

Applicants respectfully assert that the election is made provisionally and with traverse with respect to the election of SEQ ID NO: 1.

Traversal

Unity of invention (37 CFR 1.475; PCT Rule 13), not restriction practice pursuant to 37 CFR 1.141 - 1.146), is applicable in a national stage application, such as the present application, submitted under 35 U.S.C. 371. According to 37 CFR 1.475, a national stage application of a PCT shall relate to one invention only or to a group of inventions so linked as to form a single general inventive concept ("requirement of unity of invention"). Where a group of inventions is claimed in an application, the requirement of unity of invention shall be fulfilled only when there is a technical relationship among those inventions involving one or more of the same or corresponding special technical features. The expression "special technical features" means those technical features that define a contribution which each of the claimed inventions, considered as a whole, makes over the prior art. (see also PCT Rule 13).

First, Applicants respectfully submit that examination of Group I, claims 1-11 and SEQ ID NO: 1 properly includes both (a) an isolated nucleic acid molecule comprising SEQ ID NO: 1, and (b) an isolated nucleic acid molecule encoding SEQ ID NO: 2, since (a) and (b) have a technical relationship linking them to form a single general inventive concept and also are not distinct from each other. Rather, (a) and (b) merely define the claimed nucleic acid using different limitations. As noted in the specification, SEQ ID NO: 2 is the amino acid sequence generated by the coding sequence of SEQ ID NO: 1, as shown in the sequence listing. Therefore, (a) an isolated nucleic acid molecule comprising SEQ ID NO: 1, and (b) an isolated nucleic acid molecule encoding SEQ ID NO: 2 provide

different definitions of the same disclosed invention and restriction between them is not proper. Further, Applicants respectfully submit that search and examination of both SEQ ID NO: 1 and 2 would not create a serious burden on the Examiner.

Second, Applicants respectfully submit that examination of Group I, claims 1-11 with election of SEQ ID NO: 1 also properly includes examination of SEQ ID NOS: 2-4 for the following reasons. SEQ ID NOS: 1-4 all share a technical relationship linking them to form a single general inventive concept and therefore have unity of invention as discussed below.

The specification is generally directed to isolated nucleic acid molecules that are differentially expressed in cancer tissues compared with normal tissues. The differentially expressed nucleic acid molecules in cancer tissues include sequences which encode various LFG family proteins, e.g. LFG1-6 (page 3, lines 23-26). Among these LFG family proteins, LFG1 is up-regulated in cancer compared with normal tissue samples.

LFG1 is encoded by both SEQ ID NO: 1 and 3 (Example 1, 2; page 52, line 26 – page 53, line 10; Fig. 1). Further, cDNA nucleotide sequence of SEQ ID NO: 1 encodes LFG1 composed of amino acids of SEQ ID NO: 2, and cDNA nucleotide sequence of SEQ ID NO: 3 encodes LFG1 composed of amino acids whose sequence is SEQ ID NO: 4 (page 52, line 26 – page 53, line 10). The sequence listing and Figure 1 demonstrate that SEQ ID NO: 2 fully overlaps with SEQ ID NO: 4 and that the protein sequence of SEQ ID NO: 2 is identical to that of SEQ ID NO: 4, except that SEQ ID NO: 2 lacks the first 134 amino acids at the N-terminus of SEQ ID NO: 4.

Thus, the protein LFG1, which is differentially expressed in cancer tissues, can be encoded on the basis of both SEQ ID NOS: 1 and 3. Accordingly, Applicants respectfully submit that SEQ ID NO: 1 and SEQ ID NO: 3 share a common novel special technical feature in view of encoding LFG1. Therefore, Applicants believe that claims of Group I reciting SEQ ID NOS: 1 and 3 have unity of invention and should be examined together in the present application. Further examination of Group I, claims 1-11 and SEQ ID NO: 3 properly includes both (a) an isolated nucleic acid molecule comprising SEQ ID NO: 3, and (b) an isolated nucleic acid molecule encoding SEQ ID NO: 4, since (a) and (b) have a technical relationship linking them to form a single general inventive concept and are not

distinct from each other. Rather, (a) and (b) merely define the claimed nucleic acid using different limitations. Therefore, Applicants believe that claims of Group I reciting SEQ ID NOS: 1-4 share unity of invention and should be examined together in the present application.

Additionally, in view of the above-noted relationships between SEQ ID NOS: 1-4 of encoding cDNA sequences (SEQ ID NOS: 1 and 3) and correspondingly encoded amino acid sequences (SEQ ID NOS: 2 and 4), Applicants contend that claims 12 and 13 of Group II, with respect to SEQ ID NOS: 2 and 4, should properly be examined with and not restricted from the claims of Group I. The claims of Group I, with respect to SEQ ID NOS: 1 and 3, and claims 12 and 13 of Group II, with respect to SEQ ID NOS: 2 and 4, have unity of invention since the LFG1 polypeptides of claims 12 and 13 characterized by SEQ ID NOS: 2 and 4 are encoded by the isolated nucleic acids of SEQ ID NOS: 1 and 3.

Therefore, Applicants believe that claims 1-13 with respect to SEQ ID NOS: 1-4 have unity of invention and should be examined together in the present application.

Prosecution on the merits is respectfully requested. Consideration and allowance of the claims are also requested. The foregoing is believed to be fully responsive to this office action.

If there are any additional charges with respect to this Amendment or otherwise, please charge them to Deposit Account No. 06-1130 maintained by Applicants' attorneys.

Respectfully submitted,

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